



# B-VARC BULLETIN

The Monthly Publication of the  
**BRAZOS VALLEY AMATEUR RADIO CLUB**  
Serving Fort Bend and Harris Counties

Editor in Chief: Vincent Orlando, WA5ETS 774-7651 (0800-2100 hrs)

About the Brazos Valley Amateur Radio Club . . .

Organized in 1977, the club has been growing steadily. It is a gathering place for HAM radio operators in Fort Bend and Southwest Harris Counties, and surrounding communities. It is a general-purpose type of HAM club offering a variety of activities open to all interested persons. Membership is open, not only to licensed HAM operators, but also to anyone interested in the hobby. In addition to regularly-scheduled membership meetings, the club each year conducts classes leading to amateur radio licenses, and each month sponsors a volunteer-examiner team that offers examinations in all levels of HAM licenses.

To obtain information about the club and its various activities, please call the Houston Amateur Radio Helpline (713) 488-4HAM (488-4426). For information about joining the club, contact Randy Pollard, AK5G, at (713) 667-5123.

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Volume: 16 Issue: 3

March 1993

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ADDRESS CORRECTION REQUESTED

From: *Brazos Valley Amateur Radio Club, Inc.*  
*P. O. Box 1630*  
*Missouri City, Texas 77459*



## B-VARC MEETING SCHEDULE

**Thurs, Mar. 11** General Membership Meeting  
7:30 pm Sugar Land Community Center  
Program: *Amateur Television*  
by HATS speaker

**Thurs, Apr. 1** Board Meeting  
7:30 pm Sugar Land Community Center

Larry Levy WD5DRB  
8901 Braesmont - #250  
Houston, TX 77096

# March 1993

## B-VARC Calendar of Events

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<b>7</b> 7:30pm South Texas ARES Net 3.873	<b>1</b> 6:30pm - 7:00 pm Code practice 146.51 simplex 7:30pm 34-94 Swap Net 146.94 8:00pm ARES 147.30 8:00pm Ft. Bend County RACES Net 145.49 9:00pm B-VARC Net 145. 47 & linked repeaters	<b>2</b> 8:00pm 10 X Shot 28.488 10:00pm AMSAT 147.10	<b>3</b> 8:00pm B-VARC Rag-Chew 3.960 (Busy? +3 Khz)	<b>4</b> 6:30pm RACES AMTOR Net 7.080 7:30pm Board Meeting: Sugar Land Community Center	<b>5</b>	<b>6</b> 7:30am B-VARC Breakfast 9:00am Hou Emergency Mgmt Net 146.84 (9:30 on 3.905) 8:30pm C.W. 147.32
<b>14</b> 1:30pm Texas State RACES Net 7.248 7:30pm South Texas ARES Net 3.873	<b>8</b> 7:30pm 34-94 Swap Net 146.94 8:00pm ARES 147.30 8:00pm Ft. Bend County RACES Net 145.49 9:00pm B-VARC Net 145.47 & linked repeaters	<b>9</b> 7:00pm Amateur Exams (Strake Jesuit College Prep) 8:00pm 10 X Shot 28.488 10:00pm AMSAT 147.10	<b>10</b> 8:00pm B-VARC Rag-Chew 3.960 (Busy? +3 Khz)	<b>11</b> 7:30pm General Meeting: Sugar Land Community Center	<b>12</b>	<b>13</b> 7:30am B-VARC Breakfast 9:00am Hou Emergency Mgmt Net 146.84 (9:30 on 3.905) 8:30pm C.W. 147.32
<b>21</b> 7:30pm South Texas ARES Net 3.873	<b>15</b> 6:30pm - 7:00 pm Code practice 146.51 simplex 7:30pm 34-94 Swap Net 146.94 8:00pm ARES 147.30 8:00pm Ft. Bend County RACES Net 145.49 9:00pm B-VARC Net 145. 47 & linked repeaters	<b>16</b> 8:00pm 10 X Shot 28.488 10:00pm AMSAT 147.10	<b>17</b> 8:00pm B-VARC Rag-Chew 3.960 (Busy? +3 Khz)	<b>18</b>	<b>19</b>	<b>20</b> 7:30am B-VARC Breakfast 8:00am Sidewalk Sale 9:00am Hou Emergency Mgmt Net 146.84 (9:30 on 3.905) 8:30pm C.W. 147.32
<b>28</b> 1:30pm Texas State RACES Net 7.248 7:30pm South Texas ARES Net 3.873	<b>22</b> 7:00pm Novice & Tech Class at Strake Jesuit 7:30pm 34-94 Swap Net 146.94 8:00pm ARES 147.30 8:00pm Ft. Bend County RACES Net 145.49 9:00pm B-VARC Net 145. 47 & linked repeaters	<b>23</b> 8:00pm 10 X Shot 28.488 10:00pm AMSAT 147.10	<b>24</b> 8:00pm B-VARC Rag-Chew 3.960 (Busy? +3 Khz)	<b>25</b>	<b>26</b>	<b>27</b> 7:30am B-VARC Breakfast 9:00am Hou Emergency Mgmt Net 146.84 (9:30 on 3.905) 8:30pm C.W. 147.32
<b>14</b> 1:30pm Texas State RACES Net 7.248 7:30pm South Texas ARES Net 3.873	<b>29</b> 7:00pm Novice & Tech Class at Strake Jesuit 7:30pm 34-94 Swap Net 146.94 8:00pm ARES 147.30 8:00pm Ft. Bend County RACES Net 145.49 9:00pm B-VARC Net 145. 47 & linked repeaters	<b>30</b> 8:00pm 10 X Shot 28.488 10:00pm AMSAT 147.10	<b>31</b> 8:00pm B-VARC Rag-Chew 3.960 (Busy? +3 Khz)			

## Notes from the President . . .

by Betty Wicox, KAØTEN

Isn't it strange how thoughts just seem to pop into your head with nothing to precede it and make a connection. That is how I feel as I sit here and write this tonight.

Monday nights at 9:00, the 145.47 repeater continues to be the place where many people meet. Michael Ricco, N5YKR, has accepted the net control position and is doing a nice job. Michael says that he will be trying a new format and will be needing feedback. Anytime we try something new, it may take a little getting used to. Let's give it a chance.

March 30, 1993, is the date set for the annual Fort Bend County Weather Spotter's Seminar presented by the National Weather Service. The program is approximately two hours long starting at 7:00 pm. For reservations, call 341-4429.

Al Zermeno, KK5W, has agreed to chair the preparations for Field Day. He is accepting volunteers who are willing to work toward this special day. After all, emergency communications is really what ham radio is all about—someone who can be counted on when the going gets tough. He will have a hard act to follow after the great job that Bill Kemp, KG5CB, and his team did last summer. People still talk about what a great time everyone had and that very ingenious long-wire antenna. New hams, this is a good place to get your feet wet, figuratively and literally, if it is anything like last summer.

Let's don't forget that our March program will be presented by HATS (Houston Amateur Television Society). This really is what's happening now in Houston, thanks to these people.

The sidewalk sale was superb. That large parking lot was almost half full. Let's do remember to help keep the merchants there happy with us by not tying up their parking spaces directly in front of their store fronts. Discontent is contagious, and we want everyone to love us out there.

Another couple has been attacked by the matrimonial virus that is running rampant among our ham community. Chris, N5YCH, and Bill, W5DNE, plan to tie the knot this summer. Who will be next?

Amateur Radio Serving Children (ARSC) will be participating in a spring fair on April 17th at the Ronald McDonald House, 1550 La Concha Lane, Houston, TX 77054. There will be booths serving food, offering games and music, and, of course, amateur radio demonstrations. ARSC is looking for

renewed interest by radio operators in working with these children and will be holding a monthly meeting at 11:00 am the first Saturday of each month. Charlie Prochaska, KG5KV, is a regular at the House, but he could really use some help. This is another area new hams could explore; call Jim Clarke, N5FIX, at 468-6050 or talk to Charlie.

Terry Onda, KI5FO, gave another "hair raising" presentation at the February B-VARC meeting. Sorry, Terry, bad pun, but I just couldn't resist. Great job! We do appreciate you. "Who knows what evil lurks in the heart of man?" Whoops—wrong station.

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## The World of 1Ø—1Ø International

by Al Mattis, N5AFV

The 1993 Winter QSO Party was held February 6-7, 1993, and the S.H.O.T. chapter thanks the many B-VARC members who participated. Propagation on the band was very good during much of the contest, and competition for first place is expected to be close. I wish to remind everyone about the contest three years ago when the S.H.O.T. chapter won by just twelve points. Even if you only have a couple contacts, please submit your log. The chapter needs all logs, no matter how many or how few contacts they represent.

S.H.O.T. members should send their logs to Harlan Moore, KI5UG; 7406 Standard Road; Magnolia, TX 77355. Harlan is the chapter's contest coordinator, and he will check over all logs to make sure they are complete before forwarding them to the scoring chapter. If you have a 10-10 number, participated in the contest, and do not yet belong to the S.H.O.T. chapter, please contact me. It is not too late to join the chapter and submit your log.

If you do not yet have a 10-10 number and wish to join 10-10 International, you need to collect ten 10-10 numbers over the air on the 10-meter band. Submit these numbers along with the call sign, name, and QTH of each station to Grace Dunlap, K5MRU; P. O. Box 445; La Feria, TX 78559. The cost is \$7, which includes a one-year subscription to the *10-10 International News*. I know of at least two B-VARC members who collected enough 10-10 numbers during the contest to qualify for their own number. I urge all B-VARC members who do not yet have a 10-10 number to apply for one so that you can join in the fun during the 1993 Summer QSO Party which will be held August 7-8.

The S.H.O.T. chapter has two new members. Bill Brune, N5XWU, and Larry Levy, WD5DRB, recently joined the chapter. The chapter extends a hearty welcome to Bill and Larry, and we hope our membership continues to grow.

In general, propagation on ten meters continues to be good. We have recently experienced a few episodes of poor propagation, but these conditions have not lasted more than a day or two. I still operate mobile for about 30 minutes during my lunch break each week day from the upper level of my parking garage in downtown Houston. During the last week, I have worked stations in CT, NH, OR, WA, CA, ID and Aruba. The band has been open every day.

Remember, the Houston S.H.O.T. net meets every Tuesday evening at 8:00 local on 28.488 mhz. All amateurs are welcome to check in, even if they do not have a 10-10 number. If you are not a member of 10-10 International and wish to join the organization, please check in to the net. There are a lot of exciting activities in 10-10, and many friendly people can be found on the 10-meter band.

73 de N5AFV

### Public Service

by Claudia Kozinetz, N5VCZ

"Public service communications have been a traditional responsibility of the Amateur Radio Service since 1913, when amateurs at the University of Michigan and Ohio State University, in conjunction with numerous individual amateurs in and around the region, successfully bridged the communications gap surrounding a large isolated area left by a severe windstorm in the Midwest." (Public Service Communications Manual, ARRL)

Though our events are a bit different than those described above, members of B-VARC do have the chance to participate in a variety of local public service events. Please contact the coordinators listed below, if you would like to volunteer your communication services.

Event	Date	# Hams Needed	Contact
MS-150 Bike Tour	April 17-18	35-40	Glenn Edwards, WB4LZG 498-7425
ALA Clean Air Bike Ride	May 2	20-25	Carl Hecker, KB5LDY 792-4359

## Packet Radio News

by Ray Dillard, WA5F

### Terminal Node Controllers (TNC's)

Which TNC is the best?

If you are in the market for a Packet Modem (TNC), stop and take the time to look over the all-mode units such as these:

#### *KAM from Kantronics, cost \$319*

This is the only TNC that will allow you to operator both HF Packet, Amtor or RTTY and VHF Packet at the same time, and the software features are great.

#### *MFJ1278 from MFJ, cost \$270*

I have lost count of how many modes this TNC will do. It is a very good unit, is pretty cheap and has a command mode that is very straight forward.

#### *PK232 from AEA, cost \$320*

This is one of the most popular TNC's to date. Some of the software commands are strange if you do not use them all the time, but outside of that, this is a very good unit.

These all-mode TNC's cost a lot more than a stand-alone TNC, but are probably worth the extra spending. None of the TNC's above is any better than any other; it all depends on what you like in terms of size, commands, and cost.

There is one more type of TNC on the market now, and it is labelled DSP (Digital Signal Processing). These units cost twice as much as the all-mode TNC's listed, but DSP is the future when it comes to all-digital communications. So if you have the money, and you want to be able to do HF, VHF and Satellite digital communications, these are some of the units you will want to look at:

#### *DSP-12 from L.L. Grace Communications Cost \$550*

#### *PK1232 and PK2232 from AEA Cost \$750 and \$800+*

See you all next month.

73's Ray, WA5F

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**B-VarC Board of Directors Meeting  
Minutes, February 4, 1993**

by Bud King, N5UOG

A quorum of the B-VarC Board of Directors met at the Sugar Land Community Center on February 4, 1993. This was the second meeting of the Board for the 1993 calendar year. The meeting was called to order by President Betty Wilcox, KAØTEN, at 7:30 pm.

The minutes of the January 7th meeting were submitted by Bud King, N5UOG, and approved unanimously.

The club treasurer, Sam Wilson, N5CPA, reported a balance of \$3,977.49 in the treasury as of January 31st. The treasurer's report was approved unanimously.

The president reported that Claudia Kozinetz, N5VCV, has accepted the post of Public Service Event Chairperson, and Doug Holley, KE5SR, will chair the Program Committee. Betty also informed the Board the program for March would be sponsored by the Houston Amateur Television Society.

A beautiful note from Irene Gordon, N5AYX, thanking the club for the Dr. Bill Award was received and read to the Board by the president.

Vice President Doug Holley, KE5SR, confirmed that practice CW sessions will be held on March 1st, 15th, and 29th. The frequency will be 146.51 simplex. The session will start at 6:30 pm and will last 30 minutes. The practice will start with 5 WPM and will accelerate as the proficiency of the participants improves. Doug also stated that the exact dates for the Club Picnic, to be held in April, will be announced later.

Glenn Edwards, WB4LZG, reported that the "No Code Tech Classes" will begin on March 22nd, and the final test session will possibly be held on May 17.

Jerry Borg, N5APW, reported on the problems and possible solutions concerning the MERA repeater. As the trustee for the Memorial Emergency Radio Association repeater, Jerry explained that he was aware of the repeater's problems and that they would be solved as time permits. A lively discussion was held concerning the management of the Monday night B-VarC Public Service Net. It is anticipated that a New Control Management Chairman and Committee will be appointed in the near future.

B-VarC will sponsor, and Carl Hacker, KB5LDY, will again coordinate, the A.L.A. Bike Ride of May 2nd. Carl has volunteered to contact responsible A.R.E.S. persons in order to get information concerning the possible formation of a B-VarC unit for emergency service.

Mel Thatcher, KB5ION, reported that the Wednesday night Rag Chew Net was alive and well in spite of the winter time QRM.

Randy Pollard, AK5G, has contacted Bear Creet Park management and received approval for the B-VarC Field Day dates of Saturday and Sunday, June 26-27th.

Sam Wilson, N5CPA, will set up a table at the Sidewalk Sale, every third Saturday, in order to provide information to prospective members and to collect dues from the past due and future members.

Bill Dessens, N5KXU, confirms the report that he has saved every issue of the B-VarC *Bulletin* since he became a member. Should any one desire a certain issue of the *Bulletin*, please contact Bill direct to arrange for a copy.

The meeting was adjourned at 9:00 pm.

*Beltone*

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## Results of the February Amateur Exams

by Harold Parker, ND5F

B-VARC again sponsored and administered the ARRL's Amateur Radio Examinations that were held on Tuesday evening, February 9, 1993, at Strake Jesuit College Preparatory in Houston.

### The V.E. Team

Harold Parker, ND5F  
Don Schexnaider, AB5IV  
Greg Smith, WG10

### Assistants

Carl Albrecht, AA5JW  
Craig Culver, KB5USL  
Cass Germany, KG5IT  
Irene Gordon, N5AYX

A total of thirty-four exams were administered during the evening to fourteen applicants. Four unlicensed candidates received their new "codeless" Technician licenses and four others upgraded with a total of sixteen elements passed. The overall "pass rate" for the evening was sixty-seven percent.

Congratulations to all the following who upgraded and/or passed exams:

Henry Blassingame, KB5USS — Technician  
Mark Cole, KB5WZB — Element 3B  
Richard Engel — Technician  
Herman Ledbetter — Technician  
Larry Levy, WD5DRB — Extra  
Bret Prichard, N5VOY — Element 3B  
David Shaw, KF0ZZ — Extra  
Rene Sommer — Technician  
Melvin Thatcher, KB5ION — Element 4B  
Clifford Tubbs — Technician  
Waldemar Wilde, N5WBE — General

Many thanks to all the Team Members and Assistants who volunteer their valuable time and effort each month.

All of us at B-VARC again thank Vincent, WA5ETS, and everyone at Strake Jesuit College Preparatory for making these excellent classroom facilities available to us for our exams each month.

73's ... ND5F

## Houston Selected for LF Research

by Allen Mattis, N5AFV

Reports published in the last few years have documented clear evidence of earthquake precursors being detected at extremely low frequencies below 10 Hz. Japanese scientists report evidence of radio wave earthquake precursors at frequencies as high as 100 kHz, and other studies indicate possible effects as high as 2 MHz. The reported effects are of two basic types. Primary signals consisting of magnetic transients, odd rumblings, and hissing sounds have been detected. Other studies indicate possible effects on propagation including sudden enhancement of signals (SES), sudden drops in signal strength, and perceived shifts in the received frequency of AM broadcast stations. While the cause of these reported effects is not known, two theories have been proposed. Some scientists believe that piezoelectric properties of crystals within the rocks along the fault may explain these effects. Other workers propose that the movement of saline ground water in response to the stresses along fault zones could also explain such effects.

While these studies pertain to earthquakes, there is no geological reason to believe similar effects would not occur elsewhere along active faults. All active faults are subjected to high stress within the earth's crust. Earthquakes result when this stress is rapidly released. In some fault systems, the faults experience periods of episodic movement which release the stress at a slower rate without earthquakes. In either case, the effect on piezoelectric crystals and ground water along the fault would be similar.

The Houston metropolitan area has been identified as a suitable site for research into the effect of active faulting on the LF band (200 to 500 kHz). The problem of subsidence in the Houston area is well known, and this subsidence is controlled by active faulting. A number of LF non-directional beacons (NDB's) in the Houston area are located in close proximity to active faults. PROJECT BEACON, a research project involving monitoring these beacons, has been formulated. The project is designed so that interested amateur radio operators and short wave listeners can provide the monitoring. Anyone with equipment capable of receiving the 200 to 500 kHz band will be able to participate. The project will last approximately one year. Monitors for this research project are needed, and anyone interested in participating is asked to contact me as soon as possible. Watch for details and updates in future articles.

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## FOR SALE

1. Kenwood TH-28A HT, ME-1 memory expansion, SMC-334 programmable speaker/mic, mint condition, 6 months old, cost \$415, sell \$250.
2. Kenwood TM-241A, mobile rig, mint condition, 3 months old, cost \$380, sell \$250.

Both radios were purchased new by me from Amateur Electronic Supply Co. and are in excellent condition with all manuals, original sales receipts, boxes, etc. I will pay shipping and insurance. Randy Bonin, N6UNG; Rt. 6, Box 299; Beaumont, TX 77705; (H) (409) 796-1543, (B) (409) 727-8939.

## April *Bulletin* Deadline

Articles and other material destined to be printed in the April issue of the B-VARC *Bulletin* should be submitted by no later than March 26th. Please send the material to Vincent Orlando, WA5ETS; 8900 Bellaire Boulevard; Houston, TX 77036-4699 or FAX (713) 774-6427.



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**Don't forget to spread the word about the "No Code" Tech License classes that begin on Monday, March 22nd! Call Glenn Edwards, WB4LZG, (h) 498-7425 and (w) 776-4024 for details.**

## The Palomar Tuner-Tuner by Doug Holley, KE5SR

The Palomar Model PT-340 Tuner Tuner is a revision of an existing Palomar product, a noise bridge used to indicate the resonant frequency of an antenna. The Tuner Tuner is designed to let you tune your antenna circuit using only your transceiver and the antenna tuner without ever transmitting.

Once installed and turned on, the Tuner Tuner will insert a noise signal and a carrier signal to your receiver. You hear the inserted noise and can see your S-meter rise to +20 db. Once activated, the Tuner Tuner will display a blinking red light to indicate that it is on and remind you not to use your transmitter while the Tuner Tuner is active within the circuit.

As you adjust the tuner, you will see the S-meter dip, usually to around S-9, and you will note that the noise inserted in the receiver will drop. This indication should be your lowest SWR. The Tuner Tuner will not lower the existing SWR in the circuit but will let you locate the lowest point without using your transmitter.

I found that the Tuner Tuner worked on all the HF bands from 10 to 160 meters. Two problems surfaced though while using the unit. First, the Tuner Tuner circuit is protected against overload by a very small fuse. The fuse blows instantly if you ever transmit while the unit is powered on. Unfortunately the replacement fuse is not readily available at most electronic stores. No matter how careful you may be, if you are like me, you will forget during your tune-up and try to use the transmitter while the Tuner Tuner is turned on. And there goes that fuse!

The second problem I found with the unit is that if you are located in an area where there is a lot of electrical noise, such as near power lines, the noise inserted in the circuit by the Tuner Tuner is difficult to distinguish from the external electrical noise. The S-meter dip will still occur and tune-up can still be accomplished using the dip, but the drop in the inserted noise is difficult to detect.

On a scale of one to ten I would rate the Tuner Tuner an eight. It does a good job for easy tune up without QRM, but forgetting from time to time to turn the unit off before transmitting may keep you looking for fuses.

The Tuner Tuner is available through Palomar Engineers for \$99.95 plus shipping.